

NTSB Order No. EA-4310

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD
at its office in Washington, D.C.
on the 21st day of December, 1994

Docket SE-13316

was waived in accordance with the Aviation Safety Reporting Program. We deny the appeal.

Respondent is a mechanic for United Airlines, Inc. The Administrator's complaint involves respondent's work on a Boeing 737-522 engine that had experienced a bird strike. In accordance with United's maintenance manuals, a borescope inspection of the engine was performed to check for damage to the fan blades. Respondent was one of several mechanics who worked on this project. At the time it was finished, two mechanics were working on it (having accepted handoffs from other mechanics who had not finished the work when their shifts were over). These mechanics were respondent and Len Kyelberg. Of the two, only respondent was qualified to perform the borescope procedure. When Mr. (...continued)

§ 43.13 Performance rules (general).

(a) Each person performing maintenance, alteration, or preventive maintenance on an aircraft, engine, propeller, or appliance shall use the methods, techniques, and practices prescribed in the current manufacturer's maintenance manual or Instructions for Continued Airworthiness prepared by its manufacturer, or other methods, techniques, and practices acceptable to the Administrator, except as noted in § 43.16.

He shall use the tools, equipment, and test apparatus necessary to assure completion of the work in accordance with accepted industry practices. If special equipment or test apparatus is recommended by the manufacturer involved, he must use that equipment or apparatus or its equivalent acceptable to the Administrator.

(b) Each person maintaining or altering, or performing preventive maintenance, shall do that work in such a manner and use materials of such a quality, that the condition of the aircraft, airframe, aircraft engine, propeller, or appliance worked on will be at least equal to its original or properly altered condition (with regard to aerodynamic function, structural strength, resistance to vibration and deterioration, and other qualities affecting airworthiness).

Kyelberg accepted his "handoff," he was specifically shown that the manual rotation drive pad cover plate had been removed.³

Both respondent and Mr. Kyelberg signed a "non-routine maintenance" card indicating the work that had been done on the aircraft, i.e., the borescope inspection. Respondent alone signed off on a computer entry indicating that the work was completed.

The aircraft was returned to service. On its next flight, almost immediately after takeoff, the same engine experienced a total loss of oil pressure. The aircraft returned to the departure airport without serious incident. The pressure loss was soon determined to have been caused by a failure to reinstall the drive pad cover plate. Mr. Kyelberg admitted to having forgotten to reinstall it. There is no dispute that failure to reattach the cover plate violated the carrier's maintenance manual and violated § 43.13(a), and allowed an aircraft to return to service in a condition that did not meet the requirements of § 43.13(b). The question before us is whether respondent should be held responsible. We agree with the law judge that the answer must be yes, although our reasons differ from those urged by the Administrator.

At the hearing, the Administrator argued primarily that respondent is culpable because he logged the completed work in the computerized maintenance log. The Administrator cited

³It is necessary to remove the plate so that the blades of the engine may be rotated manually, a procedure that is a part of the borescope examination. Tr. at 33-34.

United's "General Maintenance Regulations," ¶ 5B (Exhibit C-6), which reads:

Work documents, when properly filled out and signed, constitute a certification that all phases of required maintenance work have been completed and that the airplane is deemed to be in an airworthy condition.

The Administrator noted that there were procedures available for respondent to have indicated incomplete work. See id. at ¶ 8A. Respondent contends that United's procedures did not clearly make him responsible for work done by others, that he reasonably relied on Mr. Kyelberg, and that, since the incident, United has amended its procedures for performing borescope inspections to require more detailed signoffs.

We disagree with the Administrator's contention that respondent's computerized signoff should be taken as a certification by him of the engine's airworthiness. Respondent explained that the identification number of the employee who logs into the computer will be the only employee identification number recorded in the computer, regardless of who or how many actually did the particular task(s). Tr. at 142-143. There is no evidence that United considered the computer log the ultimate authority for certification responsibility. Here, respondent and Mr. Kyelberg also signed the non-routine maintenance card, the paper record of the work performed. The fact that the computerized record contains only the name (actually, the employee identification number) of the employee entering the information is not sufficient, in our view, absent evidence of

company custom or employee understanding, that the borescope operator would be responsible for ensuring that any mechanic working with him completed any and all work properly. Further, the record indicates (and the Administrator does not argue to the contrary) that respondent was not considered the lead mechanic for this task, and that both he and Mr. Kyelberg signed off on the non-routine job card. Although the maintenance manual section entitled "Mechanic Personnel - Responsibilities and Duties," indicates that mechanics may be held responsible for work performed by other employees assigned to them, the Administrator offered no evidence on which we might find that Mr. Kyelberg was "assigned" to respondent.

The Administrator also suggests that respondent is liable pursuant to Exhibit C-6 because he signed the non-routine maintenance card. The flaw in this theory is that Mr. Kyelberg also signed that card and he logically cannot be held responsible for respondent's work when he was not even qualified to perform a borescope examination. We will not find that signature on the card implicates respondent but not the other signatory, absent some more compelling indication of why that should be so.

Despite our disagreement with the Administrator's theories of responsibility,⁴ we agree that respondent violated the cited

⁴We also disagree with the Administrator's reliance on other sections of United's manual that direct mechanics who are handing-off work to indicate all the work that still must be done "to preclude the possibility of work being left incomplete." (*Id.*, ¶ 8A.) These provisions are of no moment when, as here, respondent does not know that a mechanic has inadvertently failed to complete all necessary work.

rules. Our analysis does not depend on any implied responsibility, but on the fact that the task of closing the cover plate was a task specifically included in United's borescope procedures. In making this finding, we are not treating respondent as an inspector or supervisor of any sort, as respondent claims in his appeal.

As noted, of the two mechanics assigned the task, respondent was the employee qualified and authorized to perform the borescope inspection. Implicit in respondent's claims of reliance and company practice is the theory that he was responsible only for the examination portion of the borescope procedure. However, the written borescope instructions for manual rotation (the method respondent and Mr. Kyelberg used) included the following:

Remove cover plate

Rotate core engine rotor as required

Lightly coat bolts with grease LUB4501-1. Install O-ring J221P153 on cover and install cover plate on core engine rotation pad with 3 bolts. . . .

Exhibit C-3.

Thus, respondent had explicit, written directions regarding removal and reinstallation of the cover plate. As the person qualified to perform the borescope procedure, he was responsible under these instructions for proper cover plate reinstallation.⁵

⁵Moreover, we note that respondent offered no evidence in the form, for example, of statements from United management or supervisors, that would support a finding that company custom and practice was to expect the qualified mechanic to perform only the actual blade examination with the borescope and not to perform or

If he chose to allow another to perform work specifically incorporated in instructions for a procedure that only he was authorized by the company to perform, he must be responsible for the consequences of that action. Respondent's citation to various cases establishing a "reasonable reliance" principle are not applicable here. See Administrator v. Fay & Takacs, NTSB Order EA-3501 (1992) and Administrator v. Dickman & Corrons, 3 NTSB 2252 (1980) at 2257-2258 (reliance no defense when the task is specifically part of respondent's duties; the reasonable reliance defense was adopted primarily to recognize that pilots-in-command could not reasonably be held accountable for every aspect of the flight).

United has special documentation (called TODs, Task Oriented Documents) it has adopted for specific maintenance tasks, under which the mechanic is provided, in writing, the specific steps to be performed and checked. We recognize that, sometime after this incident, United adopted a TOD for the borescope procedure. Part of that TOD directs: that there be a specific signoff for reinstallation of the cover plate; that a lead mechanic verify that the drive pad cover plate has been reinstalled; and that a lead mechanic sign off on the reinstallation. We are not convinced, however, that this action should be taken as agreement by United that, under its prior procedure, respondent would not have been accountable.

(..continued)
be responsible in any way for the other tasks that preceded and followed that examination.

Respondent also argues that the order should be dismissed because United's internal "shift fact-finding investigation" only named Mr. Kyelberg responsible. See Exhibit R-1. The "recommendation" of one individual (a foreman, apparently, see id. at page 6), absent some showing that United management adopted this position and believed it to be consistent with United's manual and/or procedures, does not warrant dismissal of the charges. Indeed, a finding that Mr. Kyelberg "was in fact the person in the best position to prevent this from occurring" (id. at page 5) would not appear to preclude United from finding that respondent also failed satisfactorily to complete the borescope examination. And Exhibit R-1 (at page 5, ¶ 3) suggests to us that another mechanic, the one who removed the cover plate and made the handoff to Mr. Kyelberg, may have violated United procedures in that he did not write up the incomplete job when the shift changed. See id., Exhibit C-7 at ¶ 4A(4), and Exhibit C-6 at ¶ 8. There is no recommendation in R-1 directed to this individual.

Finally, respondent argues that it was reversible error for the law judge to find that respondent had admitted ¶ 4 of the complaint. This paragraph alleged that item 72-00-41, page 201, of United's manual required the mechanic, after completing the borescope inspection, to install, secure and safety wire the cover plate. Exhibit C-3 is the referenced item 72-00-41. Although we find the law judge's conclusion reasonably supported by respondent's statements at the hearing regarding this matter

(see Tr. at 8-11), this argument is moot in view of the above discussion and our conclusion, after a review of the record, that Exhibit C-3, the written borescope procedure at the time of the incident, did require the mechanic performing the borescope procedure (i.e., respondent) to reinstall the cover plate.

ACCORDINGLY, IT IS ORDERED THAT:

1. Respondent's appeal is denied; and
2. The initial decision is affirmed.

HALL, Chairman, LAUBER and HAMMERSCHMIDT, Members of the Board, concurred in the above opinion and order.